WHAT IS CLAIMED IS:

1. A glass bulb for a cathode ray tube which comprises a panel portion with a face portion of substantially rectangular shape and a skirt portion forming a side wall for the face portion, a funnel portion and a neck portion, wherein a compressive stress is formed ~~at~~ in at least an outer surface of the panel portion by physically strengthening; there is a relation of $1.0 \leqq t_R/t_F \leqq 1.4$ between the maximum wall thickness t_F of the face portion on at least one axis of a long axis and a short axis which pass through the center of the face portion and which cross at a right angle, and the maximum wall thickness t_R of a blend R portion for connecting the skirt portion; and a formula of $7MPa \leqq |\sigma_c| \leqq 30MPa$ is satisfied where σc is a compressive stress value by physically strengthening in at least an area including a position at which the maximum tensile vacuum stress σ_{Vmax} is formed after the assembling of the cathode ray tube.

2. A glass bulb for a cathode ray tube according to Claim 1, wherein there is a relation of $t_R \leqq R_b$ between the maximum wall thickness t_R of the blend R portion and the radius of curvature R_b of the blend R portion in general.

3. A cathode ray tube which has the panel portion as defined in Claim 1.

4. A glass bulb for a cathode ray tube according to Claim 1, wherein there is a relation of $1.0 \leqq t_R/t_F \leqq 1.3$

between the maximum wall thickness t_F of the face portion on at least one axis of a long axis and a short axis which pass through the center of the face portion and which cross at a right angle, and the maximum wall thickness t_R of a blend R portion for connecting the skirt portion; and a formula of $7MPa \leqq |\sigma_c| \leqq 30MPa$ is satisfied where σc is a compressive stress value by physically strengthening in at least an area including a position at which the maximum tensile vacuum stress σ_{Vmax} is formed after the assembling of the cathode ray tube.

5. A glass bulb for a cathode ray tube according to Claim 4, wherein there is a relation of $t_R \leqq R_b$ between the maximum wall thickness t_R of the blend R portion and the radius of curvature R_b of the blend R portion in general.

6. A cathode ray tube which has the panel portion as defined in Claim 4.